

**STATEMENT OF BASIS (AI No. 3577)  
PER20060001**

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0065943** to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Cargill, Inc.  
Terre Haute Marine Facility  
2154 Highway 44 (River Road)  
Reserve, Louisiana 70084

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Lisa Kemp

**DATE PREPARED:** June 23, 2006

**1. PERMIT STATUS**

**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

**B. NPDES permit -** NPDES permit effective date: N/A  
NPDES permit expiration date: N/A  
EPA has not retained enforcement authority.

**C. LPDES permit -**  
LPDES permit effective date: September 1, 2001  
LPDES permit expiration date: August 31, 2006  
This permit was modified effective January 1, 2004

**D. Date Application Received:** February 27, 2006; additional information received via email June 16, 2006, and June 20, 2006

**2. FACILITY INFORMATION**

**A. FACILITY TYPE/ACTIVITY - existing grain elevator and bulk liquid terminal**

Cargill operates an existing grain elevator and bulk liquids terminal. Grains, including corn, milo (or sorghum), wheat, soybeans, barley, oats, sunflower seeds, and NGFI (non-grain food ingredients including meal, pellets, and rice) are received by barge and rail; stored, and shipped by barge and ship. The facility handles approximately 10,500,000 tons of grain per year. Liquid products including molasses and vegetable oils (canola, soybean, coconut, and palm) are stored and shipped by barge, rail, and tank truck.

Equipment maintenance and repair are conducted near the mechanical shop. Dust and grain residue are also rinsed from powered industrial equipment (such as bobcats) in this area. There is a paved lot on site where employees can rinse their vehicles. No soaps or detergents are used for the vehicle and equipment wash activities.

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Discharges from the facility include stormwater runoff, vehicle and equipment washwater, non-contact cooling water, and dock washdown.

**B. FEE RATE**

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: III
4. SIC code: 5153 ( Grain Elevator), 4491 ( Marine Cargo Handling), and 4226 (Special Warehousing and Storage, Not Elsewhere Classified)

**C. LOCATION** - 2154 Highway 44 (River Road), between the Illinois Central Gulf Railroad and the east bank (left descending bank) of the Mississippi River, at River Mile 139.6, in Reserve, St. John the Baptist Parish

Latitude 30° 03' 22", Longitude 90° 34' 57"

**3. OUTFALL INFORMATION**

**Outfall 01A\***

Discharge Type: stormwater runoff from the south section of the west tank farm  
 Treatment: None  
 Location: at the point of discharge on the southeast side of the west tank farm  
 Latitude 30° 03' 22", Longitude 90° 35' 23"  
 Flow: 200 gpd (intermittent)  
 Discharge Route: unnamed drainage ditches; thence into Mississippi Bayou; thence into Dutch Bayou; thence into Lake Maurepas

**Outfall 01B\***

Discharge Type: stormwater runoff from the north section of the west tank farm  
 Treatment: None  
 Location: at the point of discharge on the northeast side of the west tank farm  
 Latitude 30° 03' 25", Longitude 90° 35' 24"  
 Flow: 200 gpd (intermittent)  
 Discharge Route: unnamed drainage ditches; thence into Mississippi Bayou; thence into Dutch Bayou; thence into Lake Maurepas

\* In order to provide better interface with LDEQ compliance tracking, these outfall designations have been changed to three character designations. For example, Outfall 001A is now 01A.

**Outfall 002**

Discharge Type: stormwater runoff from the east section of the grain elevator including the grain elevator meal storage, warehouse, oil storage, mechanic shop, and gas/diesel storage areas and washwater from the equipment rinse area  
 Treatment: None  
 Location: at the point of discharge on the north perimeter road, east of Outfall 003  
 Latitude 30° 03' 36", Longitude 90° 35' 06"  
 Flow: 87,800 gpd (intermittent)

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Discharge Route: unnamed drainage ditches; thence into Mississippi Bayou; thence into Dutch Bayou; thence into Lake Maurepas

**Outfall 003**

Discharge Type: stormwater runoff from the west and central sections of the grain elevator as well as the bulk liquids terminal; including the grain elevator silos, mineral oil storage tanks, mold inhibitor tank, cleaning tower, maintenance shop, air compressor station, weigh tower, office building, and washwater from the paved car rinse area

Treatment: None

Location: at the point of discharge on the north perimeter road, west of Outfall 002  
Latitude 30° 03' 35", Longitude 90° 35' 22"

Flow: 87,800 gpd (intermittent)

Discharge Route: unnamed drainage ditches; thence into Mississippi Bayou; thence into Dutch Bayou; thence into Lake Maurepas

**Outfall 004**

Discharge Type: once-through non-contact cooling water associated with the air conditioner units

Treatment: None

Location: at the point of discharge on the South side of the facility, between the two docks  
Latitude 30° 03' 16", Longitude 90° 35' 18"

Flow: 10,600 gpd

Discharge Route: directly to the Mississippi River

**Other Discharges:**

Cargill periodically performs pressure wash on the shipping dock. The estimated flow is 250 gallons per day. As in the previous permit, since the discharge has the same low potential for contamination as stormwater and because the facility has prepared and implemented a stormwater pollution prevention plan which includes the operations at the dock, there shall be no monitoring for the dock washdown water. See Other Conditions, Paragraph I, of the draft permit.

**Note: Sanitary wastewater and air compressor wastewater are routed to the municipal wastewater collection and treatment system.**

**4. RECEIVING WATERS**

STREAM – Outfalls 01A, 01B, 002, and 003; unnamed drainage ditches; thence into Mississippi Bayou; thence into Dutch Bayou; thence into Lake Maurepas

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040602

DESIGNATED USES - a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife

STREAM – Outfall 004 and dock washdown; directly to the Mississippi River

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BASIN AND SEGMENT – Mississippi River Basin, Segment 070301

DESIGNATED USES - a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife  
d. drinking water supply

## 5. TMDL STATUS

Outfalls 01A, 01B, 002, and 003 discharge to Subsegment 040602, Lake Maurepas (Estuarine), which is listed on LDEQ's Final 2004 303(d) List as impaired for Pathogen Indicators. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the grain elevator and bulk liquid terminal point source categories have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Pathogen Indicators (Fecal Coliforms) are not among the effluent characteristics for the stormwater runoff and vehicle and equipment washwater discharges from this existing grain elevator and bulk liquids storage facility. Therefore, the discharge from this facility should not cause or contribute to further impairment of the receiving stream due to Pathogen Indicators.

Outfall 004 and the dock washdown discharges are to Subsegment 070301, Mississippi River – From Monte Sano Bayou to Head of Passes, which is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDLs have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

## 6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale, page 7

## 7. COMPLIANCE HISTORY/COMMENTS

1. WQMD – There are no pending actions for Cargill, Inc. /Terre Haute Facility.

Warning Letter (Enforcement Tracking No. WE-L-05-0309 was issued to this facility June 24, 2005 for numerous excursions from LA0065943, most of which were TOC excursions for Outfall 003. According to the Notice of Corrected Violation issued March 16, 2006, in a response to the Warning Letter, Cargill stated that booms would be placed in the drainage ditches in an effort to lower TOC levels and training of personnel in proper procedures for discharging from the containment areas would be implemented. Cargill also stated that these updates to the BMP practices were incorporated into the Storm Water Pollution Prevention Plan for the facility.

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2. DMR Review/Excursions – DMRs were reviewed for the period 1<sup>st</sup> Qtr 2003 – 1<sup>st</sup> Qtr 2006.  
Note: Outfalls 01A and 01B have each only discharged once in the last five years according to the application and DMRs submitted. The following excursions were noted:

Date	Parameter	Outfall	Reported Value	Permit Limits
1 <sup>st</sup> Qtr 2005	Oil and Grease	01B	1034 mg/l	15 mg/l
4 <sup>th</sup> Qtr 2003	TOC	003	120 mg/l	50 mg/l
1 <sup>st</sup> Qtr 2004	TOC	003	68 mg/l	50 mg/l
2 <sup>nd</sup> Qtr 2004	TOC	003	720 mg/l	50 mg/l
4 <sup>th</sup> Qtr 2004	TOC	003	93 mg/l	50 mg/l

3. Inspection – A Compliance Inspection completed September 21, 2001 at this facility showed no areas of concern.

## 8. EXISTING EFFLUENT LIMITS

<i>OUTFALLS 001A, 001B, 002, and 003 – stormwater runoff</i>				
Pollutants	Limitations		Monitoring Frequency	Sample Type
	Monthly Average	Daily Maximum		
Flow	Report gpd	Report gpd	1/quarter	Estimate
Oil & grease	----	15 mg/l	1/quarter	Grab
TOC	----	50 mg/l	1/quarter	Grab
pH	6 s.u. (min)	9 s.u. (max)	1/quarter	Grab

<i>OUTFALL 004 – once through non-contact cooling water</i>				
Pollutants	Limitations		Monitoring Frequency	Sample Type
	Monthly Average	Daily Maximum		
Flow	Report gpd	Report gpd	1/quarter	Estimate
TOC	----	5 mg/l (Net)	1/quarter	Grab
pH	6 s.u. (min)	9 s.u. (max)	1/quarter	Grab

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## **9. ENDANGERED SPECIES**

The receiving waterbody, Subsegment 040602 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as critical habitat for the Gulf Sturgeon and the receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified as habitat for the Pallid Sturgeon, which are both listed as endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon habitats for the Gulf sturgeon or Pallid sturgeon. Effluent Limitations and Best Management Practices are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

## **10. HISTORIC SITES**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## **11. TENTATIVE DETERMINATION**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

## **12. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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### Rationale for Cargill, Inc.

#### 1. Outfalls 01A and 01B - stormwater runoff (flow is intermittent)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report: Report	Existing Permit, *
TOC	---: 50 mg/l	Existing Permit, *
Oil & Grease	---: 15 mg/l	Existing Permit, *
pH (standard units)	6.0 : 9.0 (min) : (max)	Existing Permit, *

**Treatment:** None

**Monitoring Frequency:** 1/quarter for all parameters based on the existing permit

**Limits Justification:** limits are based on the existing LPDES permit LA0065943 and current LDEQ guidance for discharges of stormwater runoff \*

\*LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

#### 2. Outfall 002 - stormwater runoff combined with washwater from equipment rinse area (flow is intermittent)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report: Report	Existing Permit, *
TOC	---: 50 mg/l	Existing Permit, *
Oil & Grease	---: 15 mg/l	Existing Permit, *
pH (standard units)	6.0 : 9.0 (min) : (max)	Existing Permit, *

**Treatment:** None

**Monitoring Frequency:** 1/quarter for all parameters based on the existing permit

**Limits Justification:** limits are based on the existing LPDES permit LA0065943 and current LDEQ guidance for discharges of stormwater runoff \*

Permits for outfalls which combine equipment washwater with stormwater typically include COD and TSS limitations. However, no soaps or detergents are used and the equipment washwater is a de minimus component of the overall flow from Outfall 002. Therefore, stormwater limitations are more appropriate.

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\* LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

3. **Outfall 003** - stormwater runoff combined with washwater from paved car rinse area (flow is intermittent)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report: Report	Existing Permit, *
TOC	---: 50 mg/l	Existing Permit, *
Oil & Grease	---: 15 mg/l	Existing Permit, *
pH (standard units)	6.0 : 9.0 (min) : (max)	Existing Permit, *

**Treatment:** None

**Monitoring Frequency:** 1/quarter for all parameters based on the existing permit

**Limits Justification:** limits are based on the existing LPDES permit LA0065943 and current LDEQ guidance for discharges of stormwater runoff \*

Permits for outfalls which combine vehicle washwater with stormwater typically include COD and TSS limitations. However, no soaps or detergents are used and the vehicle washwater is a de minimus component of the overall flow from Outfall 003. Therefore, stormwater limitations are more appropriate.

\* LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

3. **Outfall 004** - once-through non-contact cooling water associated with the air conditioner units (estimated flow is 10,600 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report: Report	Existing Permit, LAG480000, Schedule E
TOC (*1)	---: 5 mg/l (Net)	Existing Permit, LAG480000, Schedule E
pH (standard units)	6.0 : 9.0 (min) : (max)	Existing Permit, LAG480000, Schedule E

**Treatment:** None

**Monitoring Frequency:** 1/quarter for all parameters, based on the existing LPDES permit and BPJ

**Limits Justification:** limits are based on the existing LPDES permit, LA0065943, and the Light Commercial General Permit (LAG480000), Schedule E, Effluent Limitations and Monitoring Requirements for Discharges of Non-Contact Cooling Water



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- (\*1) Net = Effluent – Influent. Sampling for the TOC parameter shall be required only when additives of any kind are used in the non-contact cooling water or when the cooling water may be contaminated with organics. The TOC of the discharge shall not exceed the intake TOC by more than 5.0 mg/l. Simultaneous sampling of the effluent and the influent shall be required to establish the net value. The influent, effluent, and net value shall be reported on the DMR.

**Note:** Cargill has requested that the monitoring frequency for Outfall 004 be reduced to once per year. This request will not be approved because sampling once per year is not sufficient to demonstrate continued compliance. However, because the intake water is potable water, the average flow is 10,600 gpd directly to the Mississippi River, and there have been no excursions in the past two years, sampling once per month, as required in the LAG48, is excessive. Therefore, the sampling frequency shall remain at once per quarter.

GPD – Gallons per day  
BPJ – Best Professional Judgement

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

**STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

This facility operates under SIC codes 5153, 4491, and 4226. A SWP3 is included in the permit because in accordance with LAC33:IX.2511.A.1, stormwater shall not be required to obtain an LPDES permit "...except...discharges associated with industrial activities." In accordance with LAC 33:IX.2511B.14.h, facilities classified as SIC codes 4491 and 4226 are not considered to have stormwater discharges associated with industrial activity unless they have "vehicle maintenance shops, equipment cleaning operations, or airport deicing operations." This facility does perform equipment maintenance and repair. There is also a potential for stormwater contamination from processes including loading, unloading, and area washdown. The SWP3 shall be applied to the dock area as well as to other areas of the facility.

The SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see narrative requirements for the AI).

## **Appendix A**

Appendix A  
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## APPENDIX A

### Dry Commodities

DRY BULK MATERIALS		
Grains	Soybeans Corn Wheat Sunflower Seeds NGFI ( non-grain food ingredients including meal, pellets, and rice)	Milo (or sorghum) Barley Oats

### Liquid Commodities

Molasses		
Vegetable Oils	Canola Soybean	Coconut Palm